UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/541,283	04/03/2006	Michael Gilge	10191/4396	7697

26646 7590 10/27/2010

KENYON & KENYON LLP
ONE BROADWAY
NEW YORK, NY 10004

EXAMINER	
DAZENSKI, MARC A	

ART UNIT	PAPER NUMBER
2481	

MAIL DATE	DELIVERY MODE
10/27/2010	PAPER

Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

UNITED STATES PATENT AND TRADEMARK OFFICE

Commissioner for Patents
United States Patent and Trademark Office
P.O. Box 1450
Alexandria, VA 22313-1450
www.uspto.gov

BEFORE THE BOARD OF PATENT APPEALS AND INTERFERENCES

Application Number: 10/541,283
Filing Date: April 03, 2006
Appellant(s): GILGE, MICHAEL

Gerard A. Messina
For Appellant

EXAMINER'S ANSWER

This is in response to the appeal brief filed 26 July 2010 appealing from the Office action mailed 10 November 2009.

(1) Real Party in Interest

The examiner has no comment on the statement, or lack of statement, identifying by name the real party in interest in the brief.

(2) Related Appeals and Interferences

The examiner is not aware of any related appeals, interferences, or judicial proceedings which will directly affect or be directly affected by or have a bearing on the Board's decision in the pending appeal.

(3) Status of Claims

The following is a list of claims that are rejected and pending in the application: 37-72.

(4) Status of Amendments After Final

The examiner has no comment on the appellant's statement of the status of amendments after final rejection contained in the brief.

(5) Summary of Claimed Subject Matter

The examiner has no comment on the summary of claimed subject matter contained in the brief.

(6) Grounds of Rejection to be Reviewed on Appeal

The examiner has no comment on the appellant's statement of the grounds of rejection to be reviewed on appeal. Every ground of rejection set forth in the Office action from which the appeal is taken (as modified by any advisory actions) is being

maintained by the examiner except for the grounds of rejection (if any) listed under the subheading "WITHDRAWN REJECTIONS." New grounds of rejection (if any) are provided under the subheading "NEW GROUNDS OF REJECTION."

(7) Claims Appendix

The examiner has no comment on the copy of the appealed claims contained in the Appendix to the appellant's brief.

(8) Evidence Relied Upon

7,386,872	Shimizu	6-2008
6,741,977	Nagaya et al.	5-2004
5,724,475	Kirsten	3-1998
6,954,859	Simerly et al.	9-2005

(9) Grounds of Rejection

The following ground(s) of rejection are applicable to the appealed claims:

DETAILED ACTION

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

> (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.

Claims 37-48, 64-66, and 68-72 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shimizu (US Patent 7,386, 872), hereinafter referred to as Shimizu, in view of Nagaya et al (US Patent 6,741,977), hereinafter referred to as Nagaya.

Regarding **claim 37**, Shimizu discloses a method for recording at least one of video data and audio data generated by a capturing device having a data memory (see column 2, lines 21-27: "…a network storage type video camera system for storing moving image data into a server connected to a network, enabling to store the moving image data in real time even the server is connected to a less reliable network, and at the same time enabling to regenerate complete image data to be stored into the server."), comprising:

connecting the data memory of the capturing device to at least one recording device that has a greater storage capacity than the data memory of the capturing device (see column 7, lines 18-24: "Fig. 3 also illustrates a configuration example of a network server storage system for storing moving images to which the resolution principle of the present invention is applied. The network server storage system shown in Fig. 3 includes a digital video camera terminal 1, a moving image transmission network 2, a moving image storage server 3, and a lost packet transmission means."; as well as figures 1-3, particularly the following elements in figure 3: Digital Video Camera Terminal 1 comprising Lost Packet Storage 16 which is electrically connected via Moving Image Transmission Network 2 to Moving Image Storage Server 3 which itself comprises two memories Moving Image Data Storage 33 and Reception Packet Storage 34) ;

exchanging data between the data memory of the capturing device and the at least one recording device, whereby a virtual data memory is formed for the capturing device by operational association between the data memory of the capturing device and the at least one recording device (see column 7, lines 32-52: “The divided packets are sequentially stored into transmission packet buffer 142…The packet output from packet transmitter 143 is forwarded to moving image transmission 2 by transmission and reception means 15. Moving image transmission network 2 is assumed to be wired public network, wireless public network, wireless LAN, and the internet…In moving image storage server 3, the transmitted packet is received by packet receiver 321…and then the packet is read out in FOFO order to store into reception packet storage 34," wherein the examiner interprets "FOFO" to be a typo and that the inventor instead meant "FIFO." The examiner notes that the respective claim language fails to disclose what exactly constitutes “a virtual data memory” or “operational association” and therefore maintains that "a virtual data memory is formed for the capturing device by operational association” because the act of transferring data between Digital Video Camera Terminal 1 and Moving Image Storage Server 3 reads on the claimed “operational association” since the transferred packets are the “operation” and the devices as well as their memories have an “association” via their electrical connection through Moving Image Transmission Network 2. A “virtual data memory is formed” for the Digital Video Camera Terminal 1 because the ultimate destination(s) of the transferred packets, Reception Packet Storage 34 and Moving Image Data Storage 33, are contained in a separate device Moving Image Storage Server 3. In other words,

since the memory(s) that store the packets captured by Digital Video Camera Terminal 1 are *separate* from the terminal, this forms a "virtual data memory…for the capturing device." This general process is also outlined in figures 1-3.).

However, Shimizu fails to disclose at the capturing device, receiving a request from a user to access the exchanged data, wherein the request does not differentiate between data stored on the data memory of the capturing device and data stored on the virtual data memory; and responsive to the request, retrieving the exchanged data stored on the virtual data memory, the retrieving occurring at the capturing device. The examiner maintains it was obvious to include the missing limitations, as taught by Nagaya.

In a similar field of endeavor, Nagaya discloses at the capturing device, receiving a request from a user to access the exchanged data, (see column 7, lines 2-16: "…an image signal issued from a monitoring camera 200 is inputted to an image recording/playback apparatus 100 through an video input terminal 110 to be recorded as a digital image signal. The digital image signal as recorded can be reproduced and outputted through a video output terminal 120 to be displayed on a display device 210 in the form of an analogue image. Further, the digital image recorded can be sent to a personal computer 220 installed at a monitoring center from a LAN (local area network) terminal 140 of the image recording/playback apparatus 100 via a wide area network (WAN) 502."; see column 8, line 63 through column 9, line 14: "…identifiers (ID) of the events, relevant places and times, characteristic quantities representing the events, and the results of arithmetic operations involved in the selective or discriminative decision of

the event are stored on an image-by-image basis so that the images can be retrieved or search and/or discriminatively selected on the basis of the types of monitored events and the characteristic quantities…operation of the image recording/playback apparatus when the monitoring images are surveyed or perused by the user…The monitored event information and the image data transferred to the video memory 118 are displayed intactly on the display device 210 as the information indicative of a result of the monitoring operation."; as well as figures 1-2, particularly Monitoring Center 220 of figure 1 in which it is referred to as Monitoring Center with display screen 500, and connected to Image Recording/Playback Apparatus 100 via WAN 502);

wherein the request does not differentiate between data stored on the data memory of the capturing device and data stored on the virtual data memory, and responsive to the request, retrieving the exchanged data stored on the virtual data memory, the retrieving occurring at the capturing device (see column 9, lines 4-34: "Subsequently, the selected internal records contained in the monitored event information are read to thereby acquire a path name of the image which corresponds to the monitored event relevant to the user's perusal request, whereon the relevant image is transferred to the memory 170 from the auxiliary storage 160 by making use of the path name." The examiner notes that the respective claim language fails to disclose what exactly constitutes "does not differentiate" and thus the following is considered to read on "does not differentiate" because the request comprises types of monitored events and the characteristic qualities used to search image data, as disclosed at column 9, lines 1-3, and not the actual path name or storage location which would

comprise a location of where the data is stored, and therefore Nagaya "does not differentiate.".).

Therefore, it would have been obvious to one of ordinary skill in the art to modify the method of Shimizu to include the teachings of Nagaya, for the purpose of significantly reducing the time taken for the user to survey or peruse recorded images (see column 3, lines 59-61 of Nagaya).

Regarding **claim 38**, the combination of Shimizu and Nagaya discloses everything claimed as applied above (see claim 37). Further, Shimizu discloses wherein the data memory of the capturing device is a local data memory (The examiner notes that the respective claim language fails to disclose what exactly constitutes a "local data memory." See column 8, lines 7-11: "…packet converter 141 are stored either reception packet storage 34 or lost packet storage 16," wherein figure 3 discloses these components contained within Digital Video Camera Terminal 1).

Regarding **claim 39**, the combination of Shimizu and Nagaya discloses everything claimed as applied above (see claim 38). Further, Shimizu discloses wherein the at least one recording device forms a central data memory (The examiner notes that the respective claim language fails to disclose what exactly constitutes a "central data memory" and therefore interprets this to mean "any" data memory. See figure 3, particularly Moving Image Data Storage Means 33 and Reception Packet Storage 34 being contained within Moving Image Storage Server 3).

Regarding **claim 40**, the combination of Shimizu and Nagaya discloses everything claimed as applied above (see claim 39). Further, Shimizu discloses

wherein the capturing device is interconnected with a digital communication network (The examiner notes that the respective claim language fails to disclose what exactly constitutes "interconnected" and interprets this to mean "connected by any means." See column 7, lines 40-42: "Moving image transmission network 2 is assumed to be wired public network, wireless public network, wireless LAN, and the Internet," as well as figure 3 particularly Digital Video Camera Terminal 1 being connected to Moving Image Transmission Network 2).

Regarding **claim 41**, the combination of Shimizu and Nagaya discloses everything claimed as applied above (see claim 40). Further, Shimizu discloses wherein the at least one recording device is interconnected with the digital network (The examiner notes that the respective claim language fails to disclose what exactly constitutes "interconnected" and interprets this to mean "connected by any means." See column 7, lines 40-42: "Moving image transmission network 2 is assumed to be wired public network, wireless public network, wireless LAN, and the Internet," as well as figure 3 particularly Digital Video Camera Terminal 1 being connected to Moving Image Transmission Network 2).

Regarding **claim 42**, the combination of Shimizu and Nagaya discloses everything claimed as applied above (see claim 41). Further, Shimizu discloses wherein reading-out of data from the data memory of the capturing device for transmission to the at least one recording device is operationally dependent on input of new data into the data memory of the capturing device (The examiner notes that the respective claim language fails to disclose what exactly constitutes "operationally

dependent." See column 7, lines 32-52: "The divided packets are sequentially stored into transmission packet buffer 142…The packet output from packet transmitter 143 is forwarded to moving image transmission 2 by transmission and reception means 15. Moving image transmission network 2 is assumed to be wired public network, wireless public network, wireless LAN, and the internet…In moving image storage server 3, the transmitted packet is received by packet receiver 321…and then the packet is read out in FOFO order to store into reception packet storage 34," wherein the examiner interprets "FOFO" to be a typo and that the inventor instead meant "FIFO." See also the general apparatus exhibited in figures 1-3 which are operationally dependent since they are all electrically connected).

Regarding **claim 43**, the combination of Shimizu and Nagaya discloses everything claimed as applied above (see claim 42). Further, Shimizu discloses wherein the new data input into the data memory of the capturing device are more current in time than the data read out from the data memory of the capturing device (see column 7, lines 32-37: "The divided packets are sequentially stored into transmission packet buffer 142. Transmission pcket buffer 142 stores a plurality of packets, to transmit to packet transmitter 143 in FIFO (First In First Out) order. At the same time the copy of transmitted packets are stored into a lost packet buffer 147," wherein the entire concept behind a FIFO memory is that the data read out were inputted at an earlier time than the new data, which is by definition more "current in time.").

Regarding **claim 44**, the combination of Shimizu and Nagaya discloses everything claimed as applied above (see claim 42). Further, Shimizu discloses wherein the reading-out of data from the data memory of the capturing device for transmission includes copying of the data from the data memory of the capturing device (see column 7, lines 32-37: “The divided packets are sequentially stored into transmission packet buffer 142. Transmission packet buffer 142 stores a plurality of packets, to transmit to packet transmitter 143 in FIFO (First In First Out) order. At the same time the copy of transmitted packets are stored into a lost packet buffer 147.").

Regarding **claim 45**, the combination of Shimizu and Nagaya discloses everything claimed as applied above (see claim 43). Further, Shimizu discloses wherein the data transmitted from the data memory of the capturing device are received by the at least one recording device and stored (see column 7, lines 48-52: “In moving image storage server 3, the transmitted packet is received by packet receiver 321. The received packet is stored into reception packet buffer 322, and then the packet is read out in FOFO [sic] order to store into reception packet storage 34.”).

Regarding **claim 46**, the combination of Shimizu and Nagaya discloses everything claimed as applied above (see claim 43). Further, Shimizu discloses wherein during the input of new data into the data memory of the capturing device, older data are read out from the data memory of the capturing device for transmission (see column 7, lines 32-37: “The divided packets are sequentially stored into transmission packet buffer 142. Transmission pcket buffer 142 stores a plurality of packets, to transmit to packet transmitter 143 in FIFO (First In First Out) order. At the same time

the copy of transmitted packets are stored into a lost packet buffer 147," wherein the entire concept behind a FIFO memory is that the data read out were inputted at an earlier time than the new data, which is by definition more "current in time.").

Regarding **claim 47**, the combination of Shimizu and Nagaya discloses everything claimed as applied above (see claim 46). Further, Shimizu discloses wherein the new data are input into the data memory of the capturing device at a substantially the same rate as a rate of reading out the data from the data memory of the capturing device (The examiner notes that the respective claim language fails to disclose what exactly constitutes "substantially the same rate" and therefore interprets that normal operation of a FIFO buffer reads on "substantially the same rate." See column 8, lines 40-44: "The purpose of the system is to provide a function of Recording moving images captured by network camera terminal 1 in real time into moving image storage server 3...").

Regarding **claim 48**, the combination of Shimizu and Nagaya discloses everything claimed as applied above (see claim 47). Further, Shimizu discloses wherein the data are continually read out from the data memory of the capturing device (see column 2, lines 1-3: "...digital moving image data created by a digital video camera are generated in real time and continuously," wherein if the data is read in continuously and the camera buffers operate on FIFO principles then the data must also be read out continuously).

Regarding **claim 64**, Shimizu discloses a data capturing device for at least one of video and audio data (column 7, lines 18-24: "…a digital video camera terminal 1…" as well as figure 3 particularly Digital Video Camera Terminal 1), comprising:

a data memory for storing at least one of video and audio data (see column 8, lines 7-11: "…lost packet storage…");

a control device for the data memory (see figure 3 particularly Transmission Protocol Processor 14); and

an interface unit for facilitating communication with at least one central recording device, wherein data are transmitted via the interface unit to the at least one central recording device (see column 7, lines 38-47: ""The divided packets are sequentially stored into transmission packet buffer 142…The packet output from packet transmitter 143 is forwarded to moving image transmission 2 by transmission and reception means 15. Moving image transmission network 2 is assumed to be wired public network, wireless public network, wireless LAN, and the internet…" as well as figure 3 which shows an operational connection between Digital Video Camera Terminal 1 and Moving Image Storage Server 3);

wherein reading-out of data from the data memory for transmission to the at least one central recording device is operationally dependent on input of new data into the data memory, and whereby a virtual data memory is formed for the capturing device by operational association between the data memory and the at least one central recording device (see column 7, lines 32-52: "The divided packets are sequentially stored into transmission packet buffer 142…The packet output from packet transmitter 143 is

forwarded to moving image transmission 2 by transmission and reception means 15. Moving image transmission network 2 is assumed to be wired public network, wireless public network, wireless LAN, and the internet…In moving image storage server 3, the transmitted packet is received by packet receiver 321…and then the packet is read out in FOFO order to store into reception packet storage 34," wherein the examiner interprets "FOFO" to be a typo and that the inventor instead meant "FIFO." The examiner notes that the respective claim language fails to disclose what exactly constitutes “a virtual data memory” or “operational association” and therefore maintains that "a virtual data memory is formed for the capturing device by operational association” because the act of transferring data between Digital Video Camera Terminal 1 and Moving Image Storage Server 3 reads on the claimed “operational association” since the transferred packets are the “operation” and the devices as well as their memories have an “association” via their electrical connection through Moving Image Transmission Network 2. A “virtual data memory is formed” for the Digital Video Camera Terminal 1 because the ultimate destination(s) of the transferred packets, Reception Packet Storage 34 and Moving Image Data Storage 33, are contained in a separate device Moving Image Storage Server 3. In other words, since the memory(s) that store the packets captured by Digital Video Camera Terminal 1 are *separate* from the terminal, this forms a "virtual data memory…for the capturing device.” This general process is also outlined in figures 1-3.).

However, Shimizu fails to disclose the interface unit being configured to retrieve the transmitted data from the at least one central recording device in response to a

request from a user to access the transmitted data, wherein the request does not differentiate between data stored on the data memory and data stored on the at least one central recording device. The examiner maintains it was obvious to include the missing limitations, as taught by Nagaya.

In a similar field of endeavor, Nagaya discloses the interface unit being configured to retrieve the transmitted data from the at least one central recording device in response to a request from a user to access the transmitted data, (see column 7, lines 2-16: "…an image signal issued from a monitoring camera 200 is inputted to an image recording/playback apparatus 100 through an video input terminal 110 to be recorded as a digital image signal. The digital image signal as recorded can be reproduced and outputted through a video output terminal 120 to be displayed on a display device 210 in the form of an analogue image. Further, the digital image recorded can be sent to a personal computer 220 installed at a monitoring center from a LAN (local area network) terminal 140 of the image recording/playback apparatus 100 via a wide area network (WAN) 502."; see column 8, line 63 through column 9, line 14: "…identifiers (ID) of the events, relevant places and times, characteristic quantities representing the events, and the results of arithmetic operations involved in the selective or discriminative decision of the event are stored on an image-by-image basis so that the images can be retrieved or search and/or discriminatively selected on the basis of the types of monitored events and the characteristic quantities…operation of the image recording/playback apparatus when the monitoring images are surveyed or perused by the user…The monitored event information and the image data transferred

to the video memory 118 are displayed intactly on the display device 210 as the information indicative of a result of the monitoring operation."; as well as figures 1-2, particularly Monitoring Center 220 of figure 1 in which it is referred to as Monitoring Center with display screen 500, and connected to Image Recording/Playback Apparatus 100 via WAN 502);

wherein the request does not differentiate between data stored on the data memory and data stored on the at least one central recording device (see column 9, lines 4-34: "Subsequently, the selected internal records contained in the monitored event information are read to thereby acquire a path name of the image which corresponds to the monitored event relevant to the user's perusal request, whereon the relevant image is transferred to the memory 170 from the auxiliary storage 160 by making use of the path name." The examiner notes that the respective claim language fails to disclose what exactly constitutes "does not differentiate" and thus the following is considered to read on "does not differentiate" because the request comprises types of monitored events and the characteristic qualities used to search image data, as disclosed at column 9, lines 1-3, and not the actual path name or storage location which would comprise a location of where the data is stored, and therefore Nagaya "does not differentiate.".).

Therefore, it would have been obvious to one of ordinary skill in the art to modify the method of Shimizu to include the teachings of Nagaya, for the purpose of significantly reducing the time taken for the user to survey or peruse recorded images (see column 3, lines 59-61 of Nagaya).

Regarding **claim 65**, the combination of Shimizu and Nagaya discloses everything claimed as applied above (see claim 64). Further, Shimizu discloses wherein the reading-out of data from the data memory for transmission includes copying of data from the data memory by the control device (see column 7, lines 32-37: “The divided packets are sequentially stored into transmission packet buffer 142. Transmission packet buffer 142 stores a plurality of packets, to transmit to packet transmitter 143 in FIFO (First In First Out) order. At the same time the copy of transmitted packets are stored into a lost packet buffer 147.").

Regarding **claim 66**, the combination of Shimizu and Nagaya discloses everything claimed as applied above (see claim 65). Further, Shimizu discloses wherein data are continually read out from the data memory by the control device for transmission (see column 2, lines 1-3: "...digital moving image data created by a digital video camera are generated in real time and continuously," wherein if the data is read in continuously and the camera buffers operate on FIFO principles then the data must also be read out continuously).

Regarding **claim 68**, the combination of Shimizu and Nagaya discloses everything claimed as applied above (see claim 65). Further, Shimizu discloses wherein, if the data from the data memory have been transmitted to the at least one central recording device intact, the at least one central recording device sends a notification of the intactness of the transmitted data to the control device (see column 7, lines 32-52: “The divided packets are sequentially stored into transmission packet buffer 142…The packet output from packet transmitter 143 is forwarded to moving

image transmission 2 by transmission and reception means 15. Moving image transmission network 2 is assumed to be wired public network, wireless public network, wireless LAN, and the internet…In moving image storage server 3, the transmitted packet is received by packet receiver 321…and then the packet is read out in FOFO order to store into reception packet storage 34," wherein the examiner interprets "FOFO" to be a typo and that the inventor instead meant "FIFO"; see column 7, lines 53-63: "When no discontinuity is detected in the packet sequence number, packet receiver 321 transmits the last received sequence number…Reception notification processor 148 can confirm from the received sequence number that the packets each having an older number than this received packet is correctly received on the moving image storage server 3 side. Therefore these packets are deleted from lost packet buffer 147.").

Regarding **claim 69**, the combination of Shimizu and Nagaya discloses everything claimed as applied above (see claim 68). However the combination fails to disclose wherein, upon receipt of the notification of the intactness of the transmitted data, the control device deletes the transmitted data from the data memory (see column 7, lines 32-52: "The divided packets are sequentially stored into transmission packet buffer 142…The packet output from packet transmitter 143 is forwarded to moving image transmission 2 by transmission and reception means 15. Moving image transmission network 2 is assumed to be wired public network, wireless public network, wireless LAN, and the internet…In moving image storage server 3, the transmitted packet is received by packet receiver 321…and then the packet is read out in FOFO

order to store into reception packet storage 34," wherein the examiner interprets "FOFO" to be a typo and that the inventor instead meant "FIFO"; see column 7, lines 53-63: "When no discontinuity is detected in the packet sequence number, packet receiver 321 transmits the last received sequence number…Reception notification processor 148 can confirm from the received sequence number that the packets each having an older number than this received packet is correctly received on the moving image storage server 3 side. Therefore these packets are deleted from lost packet buffer 147.").

Regarding **claim 70**, the combination of Shimizu and Nagaya discloses everything claimed as applied above (see claim 69). Further, Shimizu at least one of a camera for generating the video data and a microphone for generating the audio data (see figure 3 particularly Image Input Portion 11 and Voice Input Portion 12 of Digital Video Camera Terminal 1).

Regarding **claim 71**, the combination of Shimizu and Nagaya discloses everything claimed as applied above (see claim 69). Further, Shimizu discloses wherein the interface unit is for interfacing a digital network, whereby data are transmitted on the digital network to the at least one central recording device that is interconnected with the digital network (see column 7, lines 32-52: "The divided packets are sequentially stored into transmission packet buffer 142…The packet output from packet transmitter 143 is forwarded to moving image transmission 2 by transmission and reception means 15. Moving image transmission network 2 is assumed to be wired public network, wireless public network, wireless LAN, and the internet…In moving

image storage server 3, the transmitted packet is received by packet receiver 321…and then the packet is read out in FOFO order to store into reception packet storage 34," wherein the examiner interprets "FOFO" to be a typo and that the inventor instead meant "FIFO.").

Regarding **claim 72**, the examiner notes that the claim merely comprises limitations previously presented in claims 64, 68 and 69 and therefore maintains that the limitations of the claim are rejected in view of the explanation set forth in claims 64, 68 and 69 above.

Claims 49, 51-63, and 67 are rejected under 35 U.S.C. 103(a) as being unpatentable over Shimizu (US Patent 7,386, 872), hereinafter referred to as Shimizu, in view of Nagaya et al (US Patent 6,741,977), hereinafter referred to as Nagaya, in view of Kirsten (US Patent 5,724,475), hereinafter referred to as Kirsten.

Regarding **claim 49,** the combination of Shimizu and Nagaya discloses everything claimed as applied above (see claim 46). However, the combination of Shimizu and Nagaya fails to disclose wherein the data are read out from the data memory of the capturing device at specified time intervals. The examiner maintains that it was well known to include the missing limitation, as taught by Kirsten.

In a similar field of endeavor, Kirsten discloses wherein the data are read out from the data memory of the capturing device at specified time intervals (see column 16, lines 5-23: "…it is preferable that the cassettes become full only after a predetermined interval, or recording fill target interval…it is desired that data be retained for a minimum of the specified archive interval…the recording fill target interval, or time

to fill the storage media once, is equal to the specified archive interval."; see column 17, lines 38-49: "A basic control algorithm is set up simply by invoking the two parameters of fill target (equal to storage capacity) and the fill target interval to control the rate at which data is sent to storage.").

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Shimizu and Nagaya to include the teachings of Kirsten, for the purpose of filling the storage medium in groups of predictable time periods (see column 16, lines 24-26).

Regarding **claim 51**, the combination of Shimizu, Nagaya, and Kirsten discloses everything claimed as applied above (see claim 49). Further, the limitations of the claim are rejected in view of the explanation set forth in claim 49 above (see column 16, lines 5-23: "…it is preferable that the cassettes become full only after a predetermined interval, or recording fill target interval…it is desired that data be retained for a minimum of the specified archive interval…the recording fill target interval, or time to fill the storage media once, is equal to the specified archive interval."; see column 17, lines 38-49: "A basic control algorithm is set up simply by invoking the two parameters of fill target (equal to storage capacity) and the fill target interval to control the rate at which data is sent to storage," wherein "recording fill target interval" reads on the claimed, "specified threshold").

Regarding **claim 52,** the combination of Shimizu, Nagaya, and Kirsten discloses everything claimed as applied above (see claim 51). Further, Kirsten discloses wherein the specified threshold is determined by the storage capacity of the data memory of the

capturing device (see column 17, lines 35-49: “A basic control algorithm is set up simply by invoking the two parameters of fill target (equal to storage capacity) and the fill target interval to control the rate at which data is sent to storage,” wherein “recording fill target interval” reads on the claimed, “specified threshold”; as well as figure 19 particularly storage data volume (v) and storage data rate (s).).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Shimizu, Nagaya and Kirsten to include the teachings of Kirsten, for the purpose of avoiding buffer overflow in the capturing device.

Regarding **claim 53**, the combination of Shimizu, Nagaya, and Kirsten discloses everything claimed as applied above (see claim 52). Further, Shimizu discloses wherein storing of data in the data memory of the capturing device provides a buffer function for data transmission to the at least one recording device (see column 7, lines 32-52: “The divided packets are sequentially stored into transmission packet buffer 142…The packet output from packet transmitter 143 is forwarded to moving image transmission 2 by transmission and reception means 15. Moving image transmission network 2 is assumed to be wired public network, wireless public network, wireless LAN, and the internet…In moving image storage server 3, the transmitted packet is received by packet receiver 321…and then the packet is read out in FOFO order to store into reception packet storage 34," wherein the examiner interprets "FOFO" to be a typo and that the inventor instead meant "FIFO." See also the general apparatus

exhibited in figures 1-3 which are operationally dependent since they are all electrically connected and exhibited in figures 1-3.).

Regarding **claim 54**, the combination of Shimizu, Nagaya, and Kirsten discloses everything claimed as applied above (see claim 53). Further, Shimizu discloses wherein the data read out from the data memory of the capturing device and successfully transmitted to the at least one recording device are deleted from the data memory of the capturing device after the successful transmission (see column 7, lines 32-52: “The divided packets are sequentially stored into transmission packet buffer 142…The packet output from packet transmitter 143 is forwarded to moving image transmission 2 by transmission and reception means 15. Moving image transmission network 2 is assumed to be wired public network, wireless public network, wireless LAN, and the internet…In moving image storage server 3, the transmitted packet is received by packet receiver 321…and then the packet is read out in FOFO order to store into reception packet storage 34," wherein the examiner interprets "FOFO" to be a typo and that the inventor instead meant "FIFO"; see column 7, lines 53-63: “When no discontinuity is detected in the packet sequence number, packet receiver 321 transmits the last received sequence number…Reception notification processor 148 can confirm from the received sequence number that the packets each having an older number than this received packet is correctly received on the moving image storage server 3 side. Therefore these packets are deleted from lost packet buffer 147.").

Regarding **claim 55**, the combination of Shimizu, Nagaya, and Kirsten discloses everything claimed as applied above (see claim 53). Further, Shimizu discloses

wherein the at least one recording device that receives the transmitted data from the data memory of the capturing device checks the transmitted data for intactness (see column 7, lines 32-52: "The divided packets are sequentially stored into transmission packet buffer 142…The packet output from packet transmitter 143 is forwarded to moving image transmission 2 by transmission and reception means 15. Moving image transmission network 2 is assumed to be wired public network, wireless public network, wireless LAN, and the internet…In moving image storage server 3, the transmitted packet is received by packet receiver 321…and then the packet is read out in FOFO order to store into reception packet storage 34," wherein the examiner interprets "FOFO" to be a typo and that the inventor instead meant "FIFO"; see column 7, lines 53-63: "When no discontinuity is detected in the packet sequence number, packet receiver 321 transmits the last received sequence number…Reception notification processor 148 can confirm from the received sequence number that the packets each having an older number than this received packet is correctly received on the moving image storage server 3 side. Therefore these packets are deleted from lost packet buffer 147.").

Regarding **claim 56**, the combination of Shimizu, Nagaya, and Kirsten discloses everything claimed as applied above (see claim 54). Further, Shimizu discloses wherein, if the data from the data memory of the capturing device have been transmitted to the at least one recording device intact, the at least one recording device sends a notification of the intactness of the transmitted data to the capturing device (see column 7, lines 32-52: "The divided packets are sequentially stored into transmission

packet buffer 142…The packet output from packet transmitter 143 is forwarded to moving image transmission 2 by transmission and reception means 15. Moving image transmission network 2 is assumed to be wired public network, wireless public network, wireless LAN, and the internet…In moving image storage server 3, the transmitted packet is received by packet receiver 321…and then the packet is read out in FOFO order to store into reception packet storage 34," wherein the examiner interprets "FOFO" to be a typo and that the inventor instead meant "FIFO"; see column 7, lines 53-63: "When no discontinuity is detected in the packet sequence number, packet receiver 321 transmits the last received sequence number…Reception notification processor 148 can confirm from the received sequence number that the packets each having an older number than this received packet is correctly received on the moving image storage server 3 side. Therefore these packets are deleted from lost packet buffer 147.").

Regarding **claim 57**, the combination of Shimizu, Nagaya, and Kirsten discloses everything claimed as applied above (see claim 56). Further, Shimizu discloses wherein, upon receipt of the notification of the intactness of the transmitted data, the capturing device deletes the transmitted data from the data memory of the capturing device (see column 7, lines 32-52: "The divided packets are sequentially stored into transmission packet buffer 142…The packet output from packet transmitter 143 is forwarded to moving image transmission 2 by transmission and reception means 15. Moving image transmission network 2 is assumed to be wired public network, wireless public network, wireless LAN, and the internet…In moving image storage server 3, the

transmitted packet is received by packet receiver 321…and then the packet is read out in FOFO order to store into reception packet storage 34," wherein the examiner interprets "FOFO" to be a typo and that the inventor instead meant "FIFO"; see column 7, lines 53-63: "When no discontinuity is detected in the packet sequence number, packet receiver 321 transmits the last received sequence number…Reception notification processor 148 can confirm from the received sequence number that the packets each having an older number than this received packet is correctly received on the moving image storage server 3 side. Therefore these packets are deleted from lost packet buffer 147.").

Regarding **claim 58**, the combination of Shimizu, Nagaya, and Kirsten discloses everything claimed as applied above (see claim 54). Further, Kirsten discloses wherein the at least one recording device has a plurality of different storage areas that correspond to a plurality of different data recording time durations (see column 15, lines 1-11: "Blocks of images…may also be placed on hold such that they will be preserved indefinitely and not be overwritten. Block(s) can be designated for holding according to factors such as date, time, and camera source…").

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Shimizu, Nagaya, and Kirsten to include the teachings of Kirsten, for the purpose of preserving images for later review if an event occurs within a known time window (see column 15, lines 1-11).

Regarding **claim 59**, the combination of Shimizu, Nagaya, and Kirsten discloses everything claimed as applied above (see claim 58). Further, Kirsten discloses wherein

the plurality of different storage areas are each reserved for a specified data recording time duration (see column 15, lines 1-11: “Blocks of images…may also be placed on hold such that they will be preserved indefinitely and not be overwritten. Block(s) can be designated for holding according to factors such as date, time, and camera source…”).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Shimizu, Nagaya, and Kirsten to include the teachings of Kirsten, for the purpose of preserving images for later review if an event occurs within a known time window (see column 15, lines 1-11).

Regarding **claim 60**, the combination of Shimizu, Nagaya, and Kirsten discloses everything claimed as applied above (see claim 58). Further, Kirsten discloses wherein the plurality of different storage areas are allocated to corresponding one of: a) a plurality of different capturing devices; and b) a plurality of different capturing units of a capturing device (see column 15, lines 1-11: “Blocks of images…may also be placed on hold such that they will be preserved indefinitely and not be overwritten. Block(s) can be designated for holding according to factors such as date, time, and camera source…”; wherein "camera source" implies that there are multiple cameras, i.e. both a plurality of different capturing devices and a plurality of different capturing units).

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Shimizu, Nagaya, and Kirsten to include the teachings of Kirsten, for the purpose of preserving images for later review if an event occurs within a known time window (see column 15, lines 1-11).

Regarding **claim 61**, the combination of Shimizu, Nagaya, and Kirsten discloses everything claimed as applied above (see claim 58). Further, Kirsten discloses wherein the plurality of different storage areas are allocated to different specified data recording time durations (see column 15, lines 1-11: "Blocks of images…may also be placed on hold such that they will be preserved indefinitely and not be overwritten. Block(s) can be designated for holding according to factors such as date, time, and camera source…").

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Shimizu, Nagaya, and Kirsten to include the teachings of Kirsten, for the purpose of preserving images for later review if an event occurs within a known time window (see column 15, lines 1-11).

Regarding **claim 62**, the combination of Shimizu, Nagaya, and Kirsten discloses everything claimed as applied above (see claim 58). Further, Kirsten discloses wherein the data memory of the capturing device has a data storage capacity corresponding to a specified time duration of data accrual (see column 16, lines 16-24: "…it is desired that data be retained for a minimum of the specified archive interval…the recording fill target interval, or time to fill the storage media once, is equal to the specified archive interval.").

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Shimizu, Nagaya, and Kirsten to include the teachings of Kirsten, for the purpose of filling the storage medium in groups of predictable time periods (see column 16, lines 24-26).

Regarding **claim 63**, the combination of Shimizu, Nagaya, and Kirsten discloses everything claimed as applied above (see claim 58). Further, Kirsten discloses wherein data are transmitted from the data memory of the capturing device to the at least one recording device when a specified time limit threshold for data accrual in the data memory of the capturing device is exceeded (see column 15, lines 1-11: "Blocks of images…may also be placed on hold such that they will be preserved indefinitely and not be overwritten. Block(s) can be designated for holding according to factors such as date, time, and camera source…"; see column 16, lines 16-24: "…it is desired that data be retained for a minimum of the specified archive interval…the recording fill target interval, or time to fill the storage media once, is equal to the specified archive interval.").

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Shimizu, Nagaya, and Kirsten to include the teachings of Kirsten, for the purpose of filling the storage medium in groups of predictable time periods (see column 16, lines 24-26).

Regarding **claim 67**, the combination of Shimizu and Nagaya discloses everything claimed as applied above (see claim 65). However the combination fails to disclose wherein data are read out at specified time intervals from the data memory by the control device for transmission. The examiner maintains that it was well known to include the missing limitation, as taught by Kirsten.

In a similar field of endeavor, Kirsten discloses wherein the data are read out from the data memory of the capturing device at specified time intervals (see column

16, lines 5-23: "…it is preferable that the cassettes become full only after a predetermined interval, or recording fill target interval…it is desired that data be retained for a minimum of the specified archive interval…the recording fill target interval, or time to fill the storage media once, is equal to the specified archive interval."; see column 17, lines 38-49: "A basic control algorithm is set up simply by invoking the two parameters of fill target (equal to storage capacity) and the fill target interval to control the rate at which data is sent to storage.").

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Shimizu and Nagaya to include the teachings of Kirsten, for the purpose of filling the storage medium in groups of predictable time periods (see column 16, lines 24-26).

Claim 50 is rejected under 35 U.S.C. 103(a) as being unpatentable over Shimizu (US Patent 7,386, 872), hereinafter referred to as Shimizu, in view of Nagaya (US Patent 6,741,977), hereinafter referred to as Nagaya, in view of Kirsten (US Patent 5,724,475), hereinafter referred to as Kirsten, further in view of Simerly et al (US Patent 6,954,859), hereinafter referred to as Simerly.

Regarding **claim 50**, the combination of Shimizu, Nagaya, and Kirsten discloses everything claimed as applied above (see claim 49). However, the combination fails to disclose wherein the data are read out from the data memory of the capturing device at a rate higher rate than a rate of input of the new data into the data memory of the capturing device. The examiner maintains that it was well known to include the missing limitations, as taught by Simerly.

In a similar field of endeavor, Simerly discloses wherein the data are read out from the data memory of the capturing device at a rate higher rate than a rate of input of the new data into the data memory of the capturing device (see column 8, line 52 through column 9, line 7: "…the centralized administrator web server 10 also allows for the configuration of customer servers 40 and camera units 50 via administrator work stations 20…The recording and archival features of the customer servers 40 can also be configured via the administrator web server in a manner similar to that described above in connection with the customer servers…The rate at which video is transmitted from a customer server to a given customer work station is also configurable.").

Therefore, it would have been obvious to one of ordinary skill in the art at the time the invention was made to modify the combination of Shimizu, Nagaya, and Kirsten to include the teachings of Simerly, for the purpose of preventing buffer overflow errors in the memory of the capturing device.

(10) Response to Argument

On page 7 of the Appeal Brief, Applicant argues that the cited sections of Nagaya do not teach the limitations of "at the capturing device receiving a request from a user to access the exchanged data...wherein the request does not differentiate between data stored on the data memory of the capturing device and data stored on the virtual data memory, and responsive to the request, retrieving exchanged data stored on the virtual data memory, the retrieving occurring at the capturing device." Also on pages 7-8, Applicant argues "…then there is no suggestion in Nagaya regarding any request from a

user to access the "data exchanged between the data memory of the capturing device and the at least one recording device," since Nagaya merely mentions that the "digital image recorded [at recording/playback apparatus 100] can be sent to a personal computer 220"…but there is no suggestion in Nagaya that any of the information stored in memory units 160 and 170…are actually sent to, or exchanged with, the personal computer." The examiner respectfully disagrees and responds below.

First, the examiner notes that Nagaya discloses "at the capturing device, receiving a request from a user to access the exchanged data…" at column 7, lines 2-16 ("…an image signal issued from a monitoring camera 200 is inputted to an image recording/playback apparatus 100 through an video input terminal 110 to be recorded as a digital image signal. The digital image signal as recorded can be reproduced and outputted through a video output terminal 120 to be displayed on a display device 210 in the form of an analogue image. Further, the digital image recorded can be sent to a personal computer 220 installed at a monitoring center from a LAN (local area network) terminal 140 of the image recording/playback apparatus 100 via a wide area network (WAN) 502."). A careful reading of the disputed limitation of claim 37 reveals that the request from a user to access the exchanged data is *received* at the capturing device; nowhere in the claim does it say the request *originates* or in any way *comes from* the capturing device. This means that the scenario in which a user at a location remote from the capturing device wishes to access exchanged data and does so using some separate computer or interface (in Nagaya, either of Personal Computer 220 or Display Device 210 would read on this) could still read on the limitation "at the capturing device,

receiving a request from a user to access the exchanged data." Indeed, Nagaya discloses this not only in previously cited column 7, lines 2-16, but also in the associated text of figure 2 particularly column 7, lines 39-47 ("In the case where the image signal outputted from the monitoring camera 200 is to be displayed intactly on the display device 210, the image signal is simultaneously stored in a video memory 118…The video memory 118 is arranged to store therein the image to be displayed on the display device 210 as digital data.") as well as figure 9 and its corresponding text, particularly column 15, lines 17-23 ("…a user interface which enables manipulation of the image recording/playback apparatus 100 and recording, reproduction and perusal of the monitoring images at a remote place such as a monitoring center. More specifically this figure shows a screen display 500 generated on a display of a personal computer 220 installed at a remote monitoring center."). Therefore, in view of the teachings of Nagaya the examiner maintains that Nagaya does in fact teach "at the capturing device receiving a request from a user to access the exchanged data." Still further, the examiner maintains that these teachings *also* refute Applicant's arguments that "…then there is no suggestion in Nagaya regarding any request from a user to access the "data exchanged between the data memory of the capturing device and the at least one recording device," since Nagaya merely mentions that the "digital image recorded [at recording/playback apparatus 100] can be sent to a personal computer 220"…but there is no suggestion in Nagaya that any of the information stored in memory units 160 and 170…are actually sent to, or exchanged with, the personal computer."

On page 8 of the Appeal Brief, Applicant further argues, "In any case, the user request for data discussed in Nagaya is absolutely not conditioned on whether or not any data has been exchanged between the data memory of the capturing device and the at least one recording device." The examiner notes that it is unclear as to which specific section of claim 37 Applicant is referring, and interprets this to mean that the Applicant is disputing that Nagaya discloses "wherein the request does not differentiate between data stored on the data memory of the capturing device and data stored on the virtual memory." The examiner respectfully disagrees and notes that Nagaya does in fact teach this limitation at column 9, lines 4-34 ("Subsequently, the selected internal records contained in the monitored event information are read to thereby acquire a path name of the image which corresponds to the monitored event relevant to the user's perusal request, whereon the relevant image is transferred to the memory 170 from the auxiliary storage 160 by making use of the path name.") The examiner notes that the respective claim language fails to disclose what exactly constitutes "does not differentiate" and thus the previously cited teaching is considered to read on "does not differentiate" because the request comprises types of monitored events and the characteristic qualities used to search image data, as disclosed at column 9, lines 1-3, and not the actual path name or storage location which would comprise a location of where the data is stored. Thus, Nagaya does in fact teach this limitation.

On page 8 of the remarks, Applicant argues, "…the Examiner's interpretation assumes that the personal computer 220 is somehow equivalent to the claimed "recording device" and Nagaya clearly doesn't suggest anything about a virtual memory

formed by operation association between the recording/playback apparatus 100 and the personal computer 200." The examiner respectfully disagrees and responds below.

Firstly, the examiner notes that the phrase "virtual memory" in and of itself is not defined in any significant detail; in fact, the only thing disclosed about the virtual memory is that it is formed "by operational association between the data memory of the capturing device and the at least one recording device." This is problematic in terms of interpretation because the phrase "operational association" is similarly vague and is not defined in any significant detail. Thus, the "operational association" can be broadly interpreted to mean simply that the components are electrically or electronically connected. Second, the examiner maintains that the act of transferring data between Digital Video Camera Terminal 1 and Moving Image Storage Server 3 reads on the claimed "operational association" since the transferring of packets are the "operation" and the devices as well as their memories have an "association" via their electrical connection through Moving Image Transmission Network 2. A "virtual data memory is formed" for the Digital Video Camera Terminal 1 because an ultimate destination(s) of the transferred packets, Reception Packet Storage 34 and Moving Image Data Storage 33, are contained in a separate device Moving Image Storage Server 3. In other words, since the memory(s) that store the packets captured by Digital Video Camera Terminal 1 are *separate* from the terminal, this forms a "virtual data memory…for the capturing device." This general process is also outlined in figures 1-3. Third, the Applicant's own specification (see e.g. page 18, lines 5-13) discloses "Now, it is provided, according to the present invention, that data memory 28 and data memory 30 are connected. This is

described, for example, in the light of a connection via digital network 16. Thereby, the reading out of data from data memory 28 for transmission of these data on digital network 16 may be logically interconnected to the input of new data into data memory 28. Because of this interconnection, a virtual data memory is made available to video server 24…" Thus it would appear that all that is required to form a "virtual memory" is that two separate memories are connected; Nagaya clearly teaches this in figures 1-2 (wherein Image Recording/Playback Apparatus 100 comprises Auxiliary Storage Unit 160 as well as Memory 170, both of which are connected to Personal Computer/Monitoring Center 220 via WAN 502). The examiner therefore maintains that the cited portions of Nagaya teach the limitations of the claimed invention.

On page 10 of the Appeal Brief, Applicant requests the reversal of the rejection to claims 49, 51-63 and 67 since they are dependent on claim 37 or 64, and Applicant believes they have proven that Shimizu and Nagaya do not render obvious parent claims 37 and 64. The examiner maintains that Shimizu and Nagaya do in fact render the parent claims obvious (see the previous response to arguments in this section), and therefore the rejections to 49, 51-63 and 67 is maintained.

On pages 10-11 of the Appeal Brief, Applicant requests the reversal of the rejection to 50 since it is dependent on claim 37, and Applicant believes they have proven that Shimizu and Nagaya do not render obvious parent claim 37. The examiner maintains that Shimizu and Nagaya do in fact render the parent claim obvious (see the previous response to arguments in this section), and therefore the rejection to claim 50 is maintained.

(11) Related Proceeding(s) Appendix

No decision rendered by a court or the Board is identified by the examiner in the Related Appeals and Interferences section of this examiner's answer.

For the above reasons, it is believed that the rejections should be sustained.

Respectfully submitted,

/MARC DAZENSKI/
Examiner, Art Unit 2481

Conferees:

/Peter-Anthony Pappas/
Supervisory Patent Examiner, Art Unit 2481

/Thai Tran/
Supervisory Patent Examiner, Art Unit 2484